

Buffalo River Conservation Committee (BRCC) Report
Public Health, Welfare, and Labor Committee
June 9, 2020

Background:

On September 30, 2016, Governor Hutchinson created the Beautiful Buffalo River Action Committee (BBRAC) to develop an Arkansas-led approach to identify and to address potential concerns in the Buffalo River Watershed.

On September 23, 2019, Governor Hutchinson signed Executive Order 19-14 establishing the Buffalo River Conservation Committee (BRCC) which replaces the Beautiful Buffalo River Action Committee (BBRAC).

Funding:

November 15, 2019: following approval by the Arkansas Legislative Council, a total of \$2 million was available for the BRCC efforts. \$1 million from the Governor's discretionary fund, and \$1 million from private donors.

Timeline of Efforts:

December 12, 2019: a 17-member subcommittee was established that is comprised of local landowners, local city and county government officials, and stakeholders in the areas of agriculture and tourism. The subcommittee is tasked with identifying opportunities for training, relationship building, and specific initiatives to preserve and enhance water quality in the watershed.

January 23, 2020: The first meeting of the BRCC members and subcommittee members scheduled to take place in Marshall, Arkansas was cancelled due to inclement weather.

February 13, 2020: BRCC members and subcommittee members convened in Marshall, Arkansas for the first meeting. During this meeting the discussion centered around four main topic areas that will be the focus for future BRCC action and funding proposals. These four topic areas include: unpaved roads; cost-share programs for agriculture; water and wastewater system infrastructure; tourism and tourism impacts.

March 11, 2020: The first coronavirus case in Arkansas prompted the cancellation of scheduled subcommittee meetings on March 19, 2020 and April 2, 2020.

April 29, 2020: BRCC members and subcommittee members convened by conference call to get an update on the work of the four subcommittees and discuss efforts to move forward.

June 2, 2020: BRCC members and subcommittee members convened to review proposals submitted for funding as well as receive updates from the four topic areas. Requests for funding included four unpaved roads sites as well as three water and wastewater proposals. During the meeting the four unpaved roads sites and funding of \$250,000 to the City of Jasper for wastewater treatment facility improvements received recommendations for funding. The full proposals for funding are included below.

Moving Forward:

BRCC members and subcommittee members will continue to refine the funding proposals that were received and will work with partners in order to maximize the use of state funding on projects within the Buffalo River Watershed.

BRCC members and subcommittee members will continue to meet as needed on the four topic areas of: unpaved roads; cost-share programs for agriculture; water and wastewater system infrastructure; tourism and tourism impacts.

The BRCC members and subcommittee members will convene as a whole at least once per quarter with the next meeting anticipated to occur between the months of July and September 2020.

**Buffalo River Conservation Committee
Unpaved Roads**

On April 29th and May 5 – 6th the Arkansas Department of Agriculture – Natural Resources Division, Arkansas Unpaved Roads Program staff and The Nature Conservancy (collectively the Unpaved Roads Team) assessed various roads in the Buffalo River watershed in Searcy and Newton counties.

Although many miles of county dirt and gravel roads exists in the Buffalo River watershed within Searcy and Newton Counties, the goal was to identify roads (high priority sites) that had the potential for a direct impact to the Buffalo River and its water quality that could be completed for \$600K.

On May 19, 2020 the Unpaved Roads Team convened a meeting with BRCC subcommittee members to discuss their findings and a potential proposal to the BRCC for funding consideration. All sites exhibit erosion and excess sediment transport to streams or the Buffalo River impacting water quality.

Without objection, the following sites will be submitted to the BRCC for consideration with a recommendation for funding approval at the June 2, 2020 meeting:

Site#	County	Road name	Project length	Total estimated cost
1	Searcy	Cane Branch Road	3,493	\$231,935
2	Newton	Lone Beach Church Road	14,784	\$80,600
3	Newton	CR 6450	11,088	\$84,400
4	Newton	Cave Mountain Road (to Hawksbill Crag)	7,392	\$157,850
SUBTOTAL				\$554,785
Contingency 10%				\$55,478
TOTAL Est. Cost				\$610,263

Erosion and sediment from unpaved roads are leading contributors to water quality issues within the state. The Nonpoint Source Management Program can currently commit previously secured funding for unpaved roads (\$110,263) to unpaved roads work in the Buffalo River watershed. These NPS funds cannot be utilized to “hard surface” any site.

Site #4 will require additional assessment and detail work. A comprehensive plan will need to be developed to include road paving and trailhead parking development. Paving is outside the prevue of the Arkansas Unpaved Roads Program thus additional partners must be identified and funds secured before an accurate timeline can be established.

As with all sites it is incumbent each respective county Judge agree to address each road site. It is anticipated once an “agreement” has been fully developed and signed by the appropriated parties work would begin. We would request work be completed in one year for the Searcy county site and one site in Newton county. However, since Newton county has three sites to be address, one of which needs further work. We anticipate work would be completed for all Newton county projects within 36 months of the execution of the “agreement”.

Site #: 1

County: Searcy

Location/Road name: Cane Branch Road

Project length: ~ 7/10 of a mile (3,493 ft') and is within approximately 3,000' from Cane Branch and the Buffalo River. Ditch runoff from this site directly impacts the Buffalo river

Site Description: Slopes from 3% - 14%, switch back curves, in road erosion, stone, cobble and sediment transport

General work to be performed: Install cross pipes, ditch reshaping, water diversion, grade breaks

Practices to be implemented:

- Install 19 culverts (cross pipes) of various size and length on 30 - 40-degree angles to road base,
- grade breaks
- ditch stops
- remove out slope berms
- surface materials (crushed stone and gravel)
- Road grading and ditch re-shaping

Estimated Cost: \$231,935 + 10% contingency



Site #: 2

County: Newton

Location/Road name: CR 8440 Lone Beach Church Road

Project length: 2.8 miles (14,784') and road runoff and ditches discharges to the riparian area of the Little Buffalo and the main road ditch discharges into the Little Buffalo directly

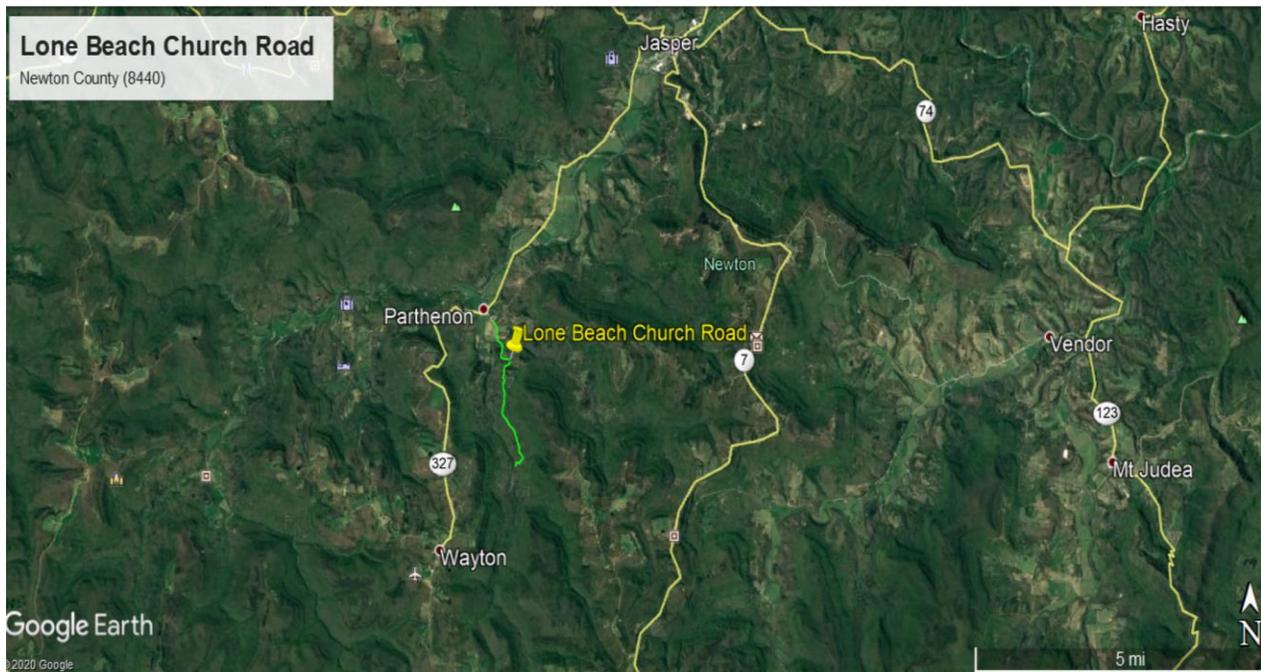
Site Description: Slopes from 3-12%, switch back curves, ditch and road shoulder erosion, stone, cobble and sediment transport

General work to be performed: Install cross pipes, ditch reshaping, and remove outer road berm

Practices to be implemented:

- Install 8 culverts (cross pipes) of various size and length on 30 - 40-degree angles to the road base
- Reshape ditches
- Add clay and compact
- Surface materials (crushed stone and gravel)

Estimated Cost: \$80,600 + 10% contingency



Site #: 3

County: Newton

Location/Road name: CR 6450

Project length: 2.1 miles (11,088') a portion of the road runs parallel approximately 1,584' from the Left Fork of Lower Big Creek

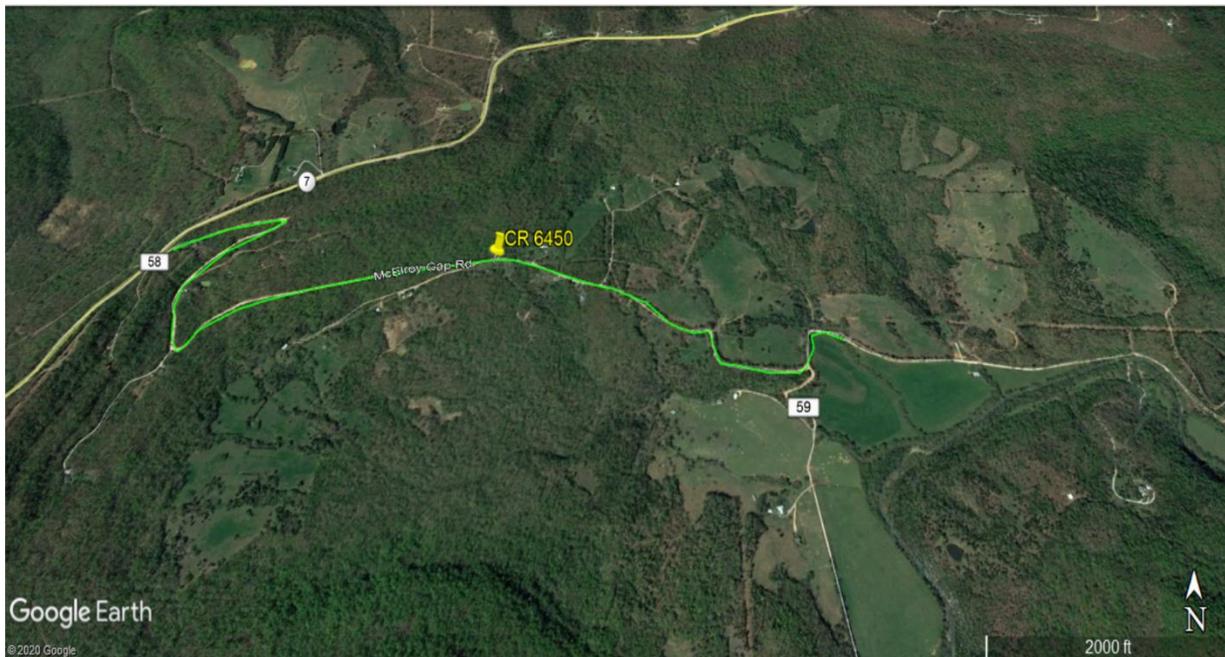
Site Description: Slopes from 3-12%, switch back curves, ditch and road shoulder erosion, stone, cobble and sediment transport

General work to be performed: Install cross pipes, ditch reshaping, and remove outer road berm

Practices to be implemented:

- Install 12 culverts (cross pipes) of various size and length on 30 - 40-degree angles to the road base
- Reshape ditches
- Add clay and compact
- Surface materials (crushed stone and gravel)

Estimated Cost: \$84,400 + 10% contingency



Site #: 4

County: Newton

Location/Road name: CR 9560 Cave Mountain Road (goes to Hawksbill Crag)

Project length: 1.4 miles (7,392') averages 1,500' or less from discharging into the Buffalo River

Site Description: Slopes from 3-15%, switch back curves, ditch and road shoulder erosion, stone, cobble and sediment transport. Due to grade and volume of traffic the road "washboards"

General work to be performed: Install cross pipes, enhance base with clay and crushed stone and roll with smooth drum roller

Practices to be implemented:

- Install 11 culverts (cross pipes) of various size and length on 30 - 40-degree angles to the road base
- Add clay and compact
- Surface materials (crushed stone and gravel)

NOTE: The work described above is to solidify and armor the base and address drainage. Unless the park service and other partners contribute to hard seal (asphalt, chip and seal or other) this issue with this road will never be sufficiently addressed.

Estimated Cost: \$157,850 + 10% contingency for road base and drainage work only



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SUBTOTAL				\$554,785
Contingency 10%				\$55,478
TOTAL Est. Cost				\$610,263

**Buffalo River Conservation Committee
Water and Wastewater**

The BRCC Water and Wastewater working group met on May 13, 2020 via Teams/conference call to discuss water and wastewater issues within the Buffalo River watershed and potential water and wastewater infrastructure projects to recommend to the BRCC for funding consideration.

The following Issues with water and wastewater infrastructure within the watershed were identified and discussed:

- Limited grant funds
- Lack of knowledge about funding sources and availability
- Most applicants would like to avoid economic implications of borrowing funds for water and wastewater infrastructure and burdening the citizens/users with higher rates or fees.

Staff from the Arkansas Department of Agriculture provided an overview of the Natural Resources Division's (NRD) water & wastewater infrastructure funding programs. USDA Rural Development reported on the federal funding programs and applicable interest rates through their programs.

Without objection, the following were selected to be submitted to the BRCC for consideration:

1. NRD Requested \$150,000 from BRCC

Project Description: The Natural Resources Division of the Arkansas Department of Agriculture would establish a Septic Tank Remediation Program (Pilot program) in the Buffalo River Watershed. The BRCC funding would be used to provide a grant to a local entity within the watershed to administer a grant/loan program for septic tank remediation. The BRCC funds would be used to hire personnel to market the program, review the work completed, and to distribute loan/grant funding provided by the NRD through the Clean Water State Revolving Loan Fund, for approved septic tank remediation costs.

2. City of Jasper requested \$350,000 from BRCC

Project description: Wastewater treatment facility improvements to include sludge processing, main pump station improvements, I/I and collection system rehabilitation.

Total project cost is \$2,041,750. NRD will work with applicant for balance of funding

3. Marble Falls Sewer Improvement District No. 1 requested \$100,000 from BRCC

Project description: As a result of regulatory comments indicating a general state of disrepair at the wastewater treatment facility, the installation of a new, smaller Advantex treatment facility at the same location as the existing wastewater treatment facility is proposed. All components would remain in use and in the current configuration except the existing package plant would be converted to a flow equalization basin and the existing blowers would be abandoned. Additionally, heat tracing would be installed on backwash water lines for the existing drum filters.

Total project cost is \$555,000. USDA Rural Development is working with the applicant for balance of funding.

City of Jasper - Newton County

Project: Improvements to Wastewater Treatment Facility

Project Description

This project is located at the existing wastewater treatment facility in the City of Jasper, Newton County, Arkansas. The existing facility discharges into the Little Buffalo River approximately six miles upstream from its confluence with the Buffalo River. The current facility has an inefficient sludge handling process, the waste sludge drying beds are located in a cool, shaded area, resulting in lengthy drying times prior to landfill disposal. The sludge cannot be processed in a timely manner and backs up in the treatment units. Several operational problems occur as a result, including violations of Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) limits which negatively impact the water quality in the Buffalo River Watershed.

In addition, the main pump station in the collection system is in a low-lying area that is prone to flooding. When flooded, the wet well is often under four feet of water creating dangerous conditions for operation and resulting in large volumes of Infiltration and Inflow (I/I) entering the system. Sanitary Sewer Overflows (SSO) in the system, particularly at the main pump station site, can rapidly enter the Little Buffalo River.

Finally, the collection system is aged, is a significant source of I/I, and in need of rehabilitation.

Necessary improvements to the wastewater treatment facility include a new sludge processing facility which would house a sludge press and associated chemical feed equipment, site pump station improvements, new flow equalization basin, and general site plumbing rehabilitation. . Additional collection system work includes a new pump station, linework and manhole rehabilitation.

Watershed Impacts

The proposed project to increase wastewater treatment plant efficiency will eliminate occasional permit parameter violations. Elimination of these violations will prevent dissolved oxygen deprivation of the Little Buffalo River and the Buffalo River watershed. This desired result is necessary in aquatic systems for the survival and growth of many aquatic organisms and will help to improve the overall water quality within the watershed.

Estimated Project Costs

Construction:	\$1,500,000
Contingencies	150,000
Engineering – Planning, Design & Construction	123,750
Engineering – Inspection	66,000
Legal Fees	17,000
Administrative	5,000
Capitalized Interest during Construction	0
Issuance fee (3%)	0
Other: Facility Plan/Environ. Report/SSSES/I&I/Utility Extension	160,000
Other: Project Performance/AIS & Davis Bacon Compliance/ O&M Man	20,000
Total Estimated Capital Cost:	\$2,041,750

Project Financial Information

The current average monthly sewer bill for the City of Jasper is \$32.30 based on 4,000 gallons of usage. The current three year (2015-2017) average Median Household Income (MHI) provided by UALR for the City of Jasper is \$27,059. The City of Jasper listed the customer base for this project at 246.

The City of Jasper requested \$350,000 from BRCC. The Natural Resources Commission will offer traditional financial assistance for the balance of the estimated project costs.

With a \$350,000 grant from BRCC the users are estimated to save approximately \$7.05 per month, based on 4,000 gallons of usage.

With a \$250,000 grant from BRCC the users are estimated to save approximately \$5.04 per month, based on 4,000 gallons of usage.

Estimated Project Timeline

If BRCC funding is approved in June, a traditional financial assistance recommendation could be presented to the Arkansas Natural Resources Commission at the July 15, 2020 meeting.

It is estimated to take 6-9 months for the loan to close and the construction to start*. Once construction commences, the project is estimated to take 1-2 years to complete.

*Dependent on the consulting engineer providing final plans and specifications.

Loan closing is estimated to be within 6-9 months from Commission approval. The first disbursement is typically for legal fees and engineering fees associated with planning and design. Construction typically starts within 30 days of loan closing.